

molecule and effectively positioned in the peptide-binding groove, and a linker sequence interposed between the presenting peptide and the MHC molecule, the fusion complex being capable of increasing or decreasing T cell proliferation or development, wherein the presenting peptide is encoded by nucleic acid sequence encoding a leader sequence attached to the presenting peptide.

52. (new) The multivalent MHC fusion complex of claim 51, wherein the MHC fusion complex does not contain the transmembrane and cytoplasmic domains of the MHC molecule and is linked to an immunoglobulin.

53. (new) The multivalent MHC fusion complex of claim 52, wherein the immunoglobulin is IgG, IgM or Fab'₂.

54. (new) The multivalent MHC fusion complex of claim 51, wherein two or more of the MHC fusion complexes are chemically cross-linked together or to a suitable particle.

55. (new) The multivalent MHC fusion complex of claim 54 wherein the MHC fusion complex are genetically modified to include amino acid residue(s) with chemically reactive side chains and the reactive side chains are used to chemically cross-link the MHC fusion complexes.

56. (new) The multivalent MHC fusion complex of claim 55 wherein the C terminus of the β chain of MHC fusion complex is genetically modified to include amino acid residue(s) with chemically reactive side chains.

57. (new) The multivalent MHC fusion complex of claim 55 wherein the amino acid is a Cys or His residue.